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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,697	09/22/2003	Judson Sloan Marte	133736	1407

6147 7590 02/08/2006

GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
PATENT DOCKET RM. BLDG. K1-4A59
NISKAYUNA, NY 12309

EXAMINER	
BARRERA, RAMON M	

ART UNIT	PAPER NUMBER
2832	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,697	MARTE ET AL.	
	Examiner	Art Unit	
	Ramon M. Barrera	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) *30-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10-17,21-26,28 and 29* is/are rejected.

7)☒ Claim(s) *8 9 18-20 27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Akioka(US5597425), cited on Applicant's IDS.

Akioka discloses in Table 3(col. 12), sample 19, which contains Pr, comprising at least 30 weight percent and at least 50 atomic percent of the rare earth content of the composition; Fe, comprising at least 50 weight percent of the transition metal content; Nd and Ce; and the alloy contains 0.1 weight percent oxygen (col. 10, line 2).

Claim Rejections - 35 USC § 103

3. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akioka, cited above.

Akioka discloses the claimed invention except for the alloy comprising at least 80 weight percent of the $R_2Fe_{14}B$ phase . Akioka in col. 5, lines 8-34, discloses the advantage of enhancing the $R_2Fe_{14}B$ phase of the magnet. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide for at least 80 weight percent of the $R_2Fe_{14}B$ phase, since it has been held that where the

general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Akioka did not specifically disclose locating the permanent magnet in a motor, a generator, or on an MRI yoke. Akioka, in col 1, lines 30-37, discloses the employment of his permanent magnets in a wide variety of fields where high performance standards are desired. It would have been obvious to one of ordinary skill at the time the invention was made to employ Akioka's permanent magnet in a motor, a generator, or on a yoke of an MRI system for the purpose of providing said devices with high energy performance characteristics.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 14-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20, 21 and 23 of U.S. Patent No. 6518867 in view of Akioka, cited above. U.S. Patent No. 6518867 did not disclose the claimed permanent magnet material. Akioka, in col 1, lines 30-37, disclosed the

employment of his permanent magnets in a wide variety of fields where high performance standards are desired. It would have been obvious to one of ordinary skill at the time the invention was made to employ Akioka's permanent magnet in U.S. Patent No. 6518867 for the purpose of providing the MRI device with high energy performance characteristics.

6. Claims 14-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 64 of copending Application No. 10/309146 in view of Akioka, cited above.

This is a provisional obviousness-type double patenting rejection.

Application No. 10/309146 did not disclose the claimed permanent magnet material. Akioka, in col 1, lines 30-37, disclosed the employment of his permanent magnets in a wide variety of fields where high performance standards are desired. It would have been obvious to one of ordinary skill at the time the invention was made to employ Akioka's permanent magnet in Application No. 10/309146 for the purpose of providing the MRI device with high energy performance characteristics.

7. Claims 21-26, 28, and 29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,2,5,7,and 12 of U.S. Patent No. 6525634 in view of Akioka, cited above. U.S. Patent No. 6525634 did not disclose the claimed permanent magnet material. Akioka, in col 1, lines 30-37, disclosed the employment of his permanent magnets in a wide variety of fields where high performance standards are desired. It would have been obvious to one of ordinary skill at the time the invention was made to employ Akioka's permanent magnet in U.S. Patent No. 6525634 for the purpose of providing the MRI device with high energy

performance characteristics. U.S. Patent No. 6525634 in view of Akioka did not disclose magnetizing the precursor body at a temperature above room temperature or subjecting the permanent magnet to a recoil pulse. It would have been obvious to one having ordinary skill in the art at the time the invention was made to magnetize the precursor body at a temperature above room temperature for the purpose of increasing the magnet's saturation magnetization and to subject the permanent magnet to a recoil pulse for the purpose of stabilizing the permanent magnet's field, since it has been held to be well known in the art to employ these methods.

Allowable Subject Matter

8. Claims 8-9, 18-20, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record disclosed or taught varying Akioka's composition in Table 3, sample 19, to contain an RE comprising about 0.5 to about 5 atomic percent Ce; and between about 0.5 to about 20 atomic percent Co.

Response to Arguments

10. Applicant's arguments filed 12/1/05 have been fully considered but they are not persuasive. Applicant states "Akioka only discloses and enables joining grains that have an average diameter less than about 150 um with a resin (i.e. a glue, binder, plastic, or other bonding agent substance to join the grains); Akioka fails to enable grains that have an average diameter less than about 150 (which are relatively microscopic as opposed to microscopic[sic]) without a resin to join them and thereby

fails to anticipate." The pertinence of applicant's arguments to the claimed invention is not understood. Neither the grain size nor the inclusion or absence of resin is deemed relevant to the claimed invention. However, contrary to applicant's assertion, Akioka's disclosure does teach either cast or resin-bonded type permanent magnets.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mizoguchi(US4878964)[table 1], Otsuka(US5011552)[example 10], and O'Handley(US5225004)[col. 8], all references cited on Applicant's IDS, disclose Applicant's claimed composition.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramon M. Barrera whose telephone number is (571) 272-1987. The examiner can normally be reached on Monday through Friday from 11 to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramon M Barrera
Ramon M Barrera
Primary Examiner
Art Unit 2832

rmb